CHAPTER 1: INTRODUCTION

Hydrology, geomorphology and habitat studies of the San Juan River began in 1992 as a part of the San Juan River Basin Recovery Implementation Program (SJRIP). The activities changed from research to monitoring beginning in 1999. The work reported here summarizes data collected in 1999 as a part of the long-term monitoring program and compares these data to that collected since 1992.

Data collected in the following areas are summarized here:

- Hydrology
- River Cross-Section Measurement
- Cobble Bar Characterization
- Suspended sediment and turbidity
- Water Temperature
- Water Quality
- Aquatic Habitat Mapping from the confluence of the San Juan and Animas Rivers (RM180) to the confluence with Lake Powell (RM 0)
- Backwater Characterization (total depth, sediment depth, water depth)

All data sets are from the 1999 field season except habitat mapping. Due to the long data analysis time after the late fall data collection, there is a one-year lag in the habitat data.

Methods for each data set are covered in the Long-Term Monitoring Plan and are not described in detail in this annual progress report. The report concentrates on data reporting with a minimum of data analysis, particularly between data sets.

SAN JUAN RIVER STUDY AREA

The seven-year research program defined 8 geomorphically distinct reaches in the San Juan River (Bliesner and Lamara, 1999). Figure 1 shows these reach locations. The bulk of the studies reported here occur within Reaches 1-6, as this encompasses the critical habitat for the endangered Colorado Pikeminnow and razorback sucker. Some studies extend outside this range where necessary to define processes that effect the critical habitat. The study area for each data set is described with the summary of that data set.

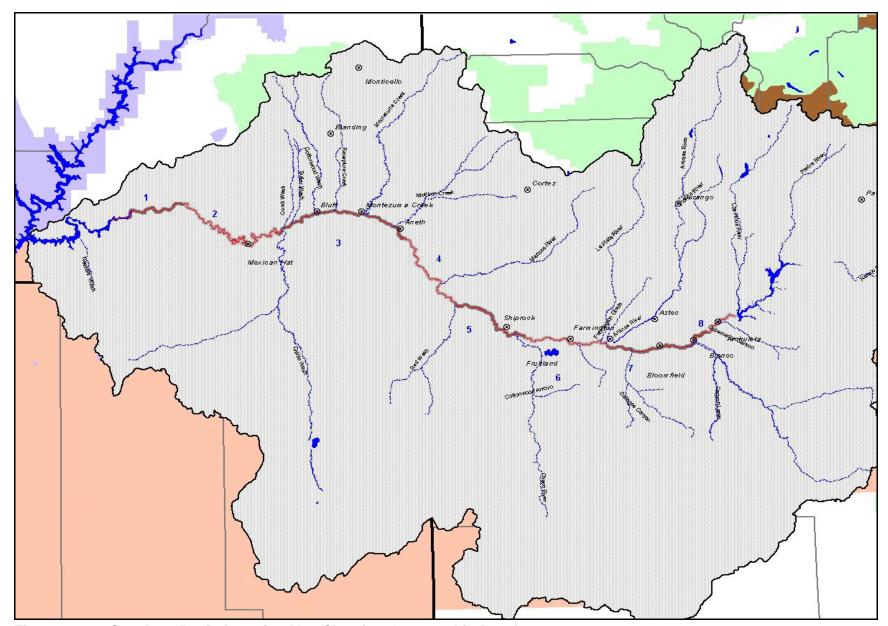


Figure 1.1. San Juan Basin Location Map Showing Geomorphic Reaches